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ABSTRACT

The report describes achievements of a 3-year program designed to teach career and life skill objectives to moderately and severely handicapped youth through arts strategies. Activities are summarized for each project year, beginning with hiring staff and identifying personnel and students at model sites (year 1); providing inservice training based on the developed materials and collecting and reviewing field test data (year 2); and identifying career opportunities in the arts for moderately and severely handicapped youth (year 3). Final products, including a field tested edition of a guide to help regular and special educators infuse the arts into their regular independent living program for handicapped adolescents, are described. Nearly one half of the document is composed of an evaluation report presenting data collected in year 3 on attitudes of cooperating teachers, adaptive behavior levels of participants, and teacher evaluations of the project's curriculum guide. Among conclusions are that teacher attitudes were very positive but showed very little change during the use of the curriculum and that students in five of six project sites showed increases on most of the behavioral domains measured by the American Association on Mental Deficiency Adaptive Behavior Scales. (CL)

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A FINAL REPORT FOR:
Increasing Career and Life Skills
for Handicapped Youth through
a Specialized Instructional
Program in the Arts

Grant Number: G007902260

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ABSTRACT

American educators have accepted the challenge to develop programs that insure the achievement of full potential for each handicapped individual. Provisions for special education and related services have been mandated by Congress and backed by the funds to research and develop new approaches. In this climate of innovation and investigation, the arts have much to offer as a vehicle for increasing the skills and strengths of handicapped children and youth.

While there are many references in the professional literature to the vital need for career education of handicapped children and youth, there is a paucity of material indicating attempts to explore techniques for providing this important component. Therefore, the goal of this proposed research project is to investigate and report to the field the results of a Specialized Instructional Program in the Arts on the career and life skills of moderately and severely handicapped youth.

The Specialized Instructional Program in the Arts will include the development of a guidebook of arts strategies for teaching career and life skill objectives to moderately and severely handicapped youth. Two assessment measures will also be developed as part of the instructional program--a criterion-referenced measure to assess progress of students participating in the program; and an attitudinal measure to be used with parents, teachers and significant others in the lives of handicapped youth. The content of both measures will be closely related to the career and life skill objectives specified in the Specialized Instructional Program. Special events for parents, teachers and potential employers will also be offered and will provide severely and moderately handicapped youth the opportunity to exhibit and demonstrate their accomplishments in the arts.

The project's research activities will be based on an experimental group only design, with approximately two hundred moderately and severely handicapped youth pre- and post-tested on the American Association on Mental Deficiency's Adaptive Behavior Scale and the Social and Prevocational Inventory Scale - Form T. In addition, parents, potential employers and significant others working with project participants will be pre- and post-tested in each of the project's three years on the attitudinal measure developed.

Careful attention will be paid to the evaluation component of this project, with provision for an Evaluator/Observer who will collect data by observation and interview as well as a Third Party Evaluator who will compile all project data for a report on project impact.

Second-year plans call for the implementation, modification and continued development of the Specialized Instructional Program. Teachers guides and additional instructional materials will be special products. Third-year efforts will be directed toward further field-testing, dissemination and toward the utilization of the Specialized Instructional Program to identify potential career opportunities in the arts for moderately and severely handicapped youth.

1.0 PROJECT BACKGROUND

1.1 Introduction

In the last decade, changes in public policy toward handicapped individuals have been accompanied by alterations in attitudes and approaches toward their education. One area of change has been the increased commitment of educators to include career education as a vital component of the educational experiences provided handicapped individuals, particularly those who are moderately and severely handicapped. If the education process is to facilitate the integration of moderately and severely handicapped into the main fabric of society, then significant educational effort must be expended to develop the career and life skills essential to their roles as functioning adults. Included in this preparation must be programs to assist handicapped persons adjust to a variety of life roles, including their roles as social beings, self-caretakers and as productive workers. The National Committee, Arts for the Handicapped (NCAH) believes that these skills, as well as other skills which promote self-reliance, self-respect and general learning, can be effectively taught through the arts.

1.2 History

In 1979, the U.S. Department of Education, Bureau of Education for the Handicapped, awarded The National Committee, Arts for the Handicapped (NCAH) a three-year grant to develop and assess the impact of a Specialized Instructional Program in the Arts designed to increase the career and life skills of moderately and severely handicapped youth. An educational affiliate of the John F. Kennedy Center for the Performing Arts located in Washington, D.C., NCAH serves as the national coordinating agency for arts programs serving the nation's disabled and is committed to the belief that the

arts provide educators, therapists and other service providers uniquely effective strategies for developing basic skills, improving self-concept and enhancing the quality of life of disabled individuals. The purpose of NCAH's Career and Life Skills Project was to demonstrate through research that the arts, when systematically utilized, could also increase overall career skills among 13-21 year olds with moderate to severe mental retardation. Accordingly, a three-year project was designed which would:

- Develop a Specialized Instructional Program in the Arts to increase the career and life skills of moderately and severely handicapped youth;
- Implement and field test the Specialized Instructional Program in the Arts with handicapped youth at diverse pilot sites throughout the country;
- Assess, through research, the impact of the Specialized Instructional Program in the Arts on the career and life skills of moderately and severely handicapped youth; and, finally,
- Disseminate information regarding the project and its materials to practitioners in the field throughout the country.

The purpose of this submission is to report the results of that three-year effort. Accordingly, the remaining sections of this report will: review and summarize Year-One activities (Section 2.0); review and summarize Year-Two activities (Section 3.0); report on major activities and accomplishments of Year-Three (Section 4.0); a description and sample of the final curriculum guide (Section 5.0); and a report of year three findings, (Section 6.0).

2.0 SUMMARY OF FIRST-YEAR ACTIVITIES

2.1 Overview: Year One

Activities of the project's first year were primarily developmental in nature. Included among these activities were: hiring project staff; selecting and contracting with project sites; identifying local coordinators and site team members at pilot sites; identifying moderately and severely handicapped youth to participate in the Specialized Instructional Program in the Arts; selecting and/or developing research and evaluation instrumentation to be utilized during the project; collecting base-line data on teachers and students participating in the project and identifying specific career and life instructional goals and objectives to be addressed by the program; and, finally, developing a sample set of field-test instructional materials to be used at project sites during the second year.

A synopsis of first-year milestones is presented in the following section. A detailed description of Year-One activities was submitted in the Year-One Report.

2.2 Year-One Milestones

● Selection of Project Staff and Consultants

Personnel with background and expertise in the areas of special education, research and administration were selected to carry out project activities. Staff included: Project Director, Eileen Daniels, with responsibility for overseeing all substantive and programmatic functions of the project; NCAH's Associate Director, Stanley Mopsik, with responsibility for monitoring and supervisory functions; NCAH's Executive Director, Bette Valenti, to assure fulfillment of project workscope.

To assure the provision of highly specialized services in the area of evaluation, special education curriculum design and the arts, highly qualified individuals in each field were selected to serve the project in a consultative capacity as follows:

- . Curriculum Consultant: Dr. Helen Almanza
- . Third Party Evaluator: Dr. William Reynolds
- . Arts Resource Consultants: Individuals with special expertise in the arts and special education were selected to assist in reviewing and developing specific arts activities for initial implementation materials

● Selection of Experimental Sites

Four geographically diverse public schools were identified to serve as project sites. Site selection was based on the following criteria:

- . Availability of approximately 50 moderately and severely handicapped youth (ages 13-21) to participate in the Specialized Instructional Program
- . Availability of district staff with sufficient interest and/or resources in the arts and special education to participate in the project's development, evaluation and implementation activities
- . Ability to participate in all project data collection activities
- . Ability to designate an individual able to carry out the responsibilities of a site team leader
- . Ability to designate special education teachers to serve as site team members participating in implementation and evaluation activities.

Project Sites selected were:

THE WOODSIDE SCHOOL
Highline Public Schools
Seattle, Washington

DIGGS SCHOOL
Winston-Salem/Forsythe County Schools
Winston-Salem, North Carolina

ADAMSON JUNIOR HIGH SCHOOL
Clayton County Schools
Morrow, Georgia

DOUGLAS COMMUNITY SCHOOL
Loudoun County Schools
Leesburg, Virginia

• Designation of Project Site Teams

At each experimental site a Project Site Team consisting of at least one site team leader and up to five site team members was identified and operationalized.

- Site Team Leaders: All site team leaders were individuals with administrative authority at the local district level who carried out project administrative liaison activities and supervised on-site activities.
- Site Team Members: All site team members were special education teachers with primary responsibility for handicapped students educational program who implemented, field-tested and evaluated the Specialized Instructional Program.

• Project Orientation Meeting

An Orientation Meeting to review project goals, objectives and procedures was held in March, 1980. The meeting, conducted by the Project Director, was attended by site team leaders/administrators from three experimental sites and the project's Third Party Evaluator. Details of project activities were described, responsibilities clarified, research and data collection activities reviewed and explained. A project calendar was agreed upon and a forum provided for voicing questions and concerns regarding project activities.

● Identification of Career and Life Goals and Objectives

A series of workshops was conducted to involve special educators at project sites in identifying those career and life goals and objectives the project materials would address.

Educators were asked to identify those skills most likely to lead to successful independent living by moderately and severely handicapped students. In all, special educators identified 151 objectives in three broad areas: Personal-Social Skills, Daily Living Skills and Occupational Guidance and Preparation Skills. These 151 constituted the operational base for all subsequent research and arts development activities.

● Development and Documentation of Initial Field-Test Materials for the Career and Life Skills Specialized Instructional Program

A guidebook of arts activities designed to meet the identified career and life skills needs of moderately and severely handicapped youth was developed as a culmination of Year-One activities. The guidebook, entitled Career and Life Skills Project: An Arts Program for Handicapped Adolescents, included a teacher's implementation guide, a selection of 45 arts activities related to three instruction areas--Personal-Social Skills, Daily Living Skills and Occupational Guidance and Preparation Skills;--evaluation materials and other arts-related resources intended to assist teachers in implementing the program. The materials in the guide were an outgrowth of the project's Year-One development activities. A detailed description and a copy of the guide was included with the Year-One Report.

3.0 SUMMARY OF YEAR-TWO ACTIVITIES

3.1 Project Background: Year Two

Activities of the Career and Life Project's second year were directed toward actualizing three broad project goals: implementing and field testing the Specialized Instructional Program in the Arts with moderately and severely handicapped youth; evaluating and assessing the impact of the Specialized Instructional Program in the Arts on the career and life skills of handicapped youth and modifying and finalizing the development of instructional materials constituting the Specialized Instructional Program.

Major accomplishments in the area of implementation and field testing included providing special educators at four national project sites with in-service training in the arts for handicapped youth through a series of development workshops; utilizing the Specialized Instructional Program in the Arts on a regular basis with approximately two hundred moderately and severely handicapped youth at four project sites in order to increase their career and life skills; collecting and reviewing field-test data on instructional materials constituting the Specialized Instructional Program in the Arts.

Year-Two activities in the area of evaluation and assessment were both formative and summative in nature and included the compilation of descriptive data on the sample student population; pre- and post-testing handicapped students participating in the Specialized Instructional Program to obtain a measure of project impact; pre- and post-testing teachers regarding their attitudes toward handicapped students and the Specialized Instructional Program in the Arts and formatively evaluating the goals and objectives upon which the Specialized Instructional Program in the Arts were based.

♦ Major activities related to modifying and finalizing the development of the Specialized Instructional Program in the Arts included developing approximately 70 new arts activities through a series of Development Workshops at each project site; reviewing arts activities with arts and curriculum consultants at a final Development/Revision Workshop and modifying arts activities on the basis of all relevant input available from formative and summative data bases.

3.2 Summary of Major Milestones: Year Two

A summary of major milestones for the project's second year is presented in this section of the report. The Year-Two Report for the project should be consulted for a detailed and comprehensive description of second-year activities.

● In-Service Meeting of Site Team Members

A two-day in-service meeting to train teachers in the utilization of the Specialized Instructional Program in the Arts was conducted as scheduled. The meeting, conducted as part of NCAH's Annual Meeting on September 29 and 30, 1981 in Washington, D.C., was attended by Site Team Members from each of the four second-year project sites. The following materials and training regarding their utilization were presented at the meeting.

- . A Teachers Guide: Explaining the scope and design of materials; procedures for utilizing arts activities and instructions for implementing the evaluation of program materials.
- . Arts Activities: A collection of 45 arts activities reflecting the mediums of visual arts, dance/movement, music and drama, each designed to meet a specific instructional

objective in either personal-social, daily living or occupational guidance and preparation skills.

Teachers Logs: Evaluation questionnaires to be completed for each activity implemented by teachers as well as an implementation calendar.

Resource Materials: Consisting of bibliographic references, adaptive art techniques and suggested materials intended to provide additional resources to teachers in implementing the arts program with their students.

In addition to reviewing program materials, site team members also received in-service training on projected Year-Two data collection, implementation and evaluation of activities.

● Collection of Pre- and Post-Test Data on Handicapped Students Utilizing the Adaptive Behavior Scale (ABS) and the Social and Prevocational Interest Battery - Form T (SPIB-T)

All handicapped students identified as sample subjects at each experimental site were assessed on parts I and II of the ABS prior to the beginning of the arts intervention on October 1, 1981. The instrument was administered by the teacher and/or ancillary staff person designated by the site team leader as the most appropriate individual to collect data. Post-testing of students with the same instrument by the same teachers took place after the arts intervention.

As with the Adaptive Behavior Scale, all handicapped students participating in the project were exposed to the test instrument prior to the beginning of the Specialized Instructional Program intervention on October 1, 1981. As anticipated, the response format, which requires students to mark responses to dictated questions, was appropriate to students functioning at the moderate end of the project's target population. Students falling at the severe end of the project's target population were more appropriately tested by the ABS where the teacher

Analysis of pre and post data indicated a significant incremental gain between pretest and post test scales in eight of the ten subscales of the ABS. Analysis of SPIB-T data was less conclusive because (a) the test format was only appropriate to a small per cent of the sample population and (b) positive gains which were reported on the SPIB-T were not found to be statistically significant. A detailed analysis of data results was included with the Year-Two report.

- Assessing Teacher Attitudes toward Handicapped Youth and the Career and Life Skills Project

All site team members were pre- and post-tested to obtain a measure of teacher attitudes toward handicapped youth and the utilization of a Specialized Instructional Program in the Arts to teach career and life skills was implemented as planned. The assessment instrument, developed by the project's Third Party Evaluator, utilized a semantic differential technique to assess teacher attitudes on four dimensions related to handicapped children and the Specialized Instructional Program in the Arts.

Overall findings from this data indicated that teachers held a strong, positive attitude toward the use of the arts curriculum. A detailed analysis of attitudinal findings was submitted with the Year-Two report.

- Curriculum Development Workshops

A series of Curriculum Development Workshops was conducted at each project site: site teams in Seattle and North Carolina participated in four development workshops; Virginia and Atlanta sites, because of local scheduling constraints, participated in three development workshops. Workshops provided special educators with in-service training regarding the application of specific art forms--visual arts, dance/movement, drama and music--to the task of teaching moderately and severely handicapped youth career and life skills.

Following an arts in-service presentation, site team members participated in a one-half day writing seminar. At each writing seminar, strategies and techniques presented by the arts resource consultant were reviewed and new arts activities developed for inclusion in the Third-Year field test version of the Specialized Instructional Program, submitted with the Year-Two Report. In all approximately sixty new arts activities were produced as a result of curriculum development activities.

● Utilization and Field Testing of Arts Activities

A Specialized Instructional Program in the Arts to teach career and life skills was utilized and field-tested with moderately and severely handicapped youth at the four project sites throughout Year-Two. The program consisted of approximately 50 arts activities addressing instructional goals and related objectives in the areas of personal-social skills, daily living and occupational guidance. A complete set of instructional and field test/evaluation materials was provided all site team members. Materials consisted of a teacher's guide to utilization, approximately 50 arts activities, suggested resources and techniques, as well as evaluation instructions and instruments. (These materials, entitled "The Career and Life Skills Project: An Arts Program for Handicapped Adolescents," were submitted with the Year-One Final Report.) Evaluation materials, or teacher logs, consisted of a sixteen question evaluation form for each arts lesson in the guide. Evaluation questions were designed to elicit information on such areas as the clarity and specificity of the lesson, the relevance of arts experience to instructional aims; and the appropriateness of the lesson to the functional level of moderately and severely handicapped adolescents. Activity evaluation forms also provided site team members opportunity to offer narrative comments and suggestions in order to improve the arts activity.

At the close of second-year implementation, all field-test data was compiled, analyzed and utilized to revise the specialized instructional program in the arts preparatory to third and final year field testing. Overall, the vast majority of activities evaluated were viewed very positively. A detailed analysis of activity evaluations was included with the year two report.

● Review and Revision of Instructional Materials

Instructional materials developed during years one and two of the project were reviewed and revised during the Summer of 1981. Several data bases were utilized in arriving at revision decisions. These included: evaluative feedback obtained from the activity evaluations for each of the field-tested arts activities; input from curriculum and arts resource consultants and project director input. The primary revision mechanism was the Career and Life Revision Workshop held in July, 1981 and participated in by curriculum and arts consultants as well as the Project Director. Procedures, materials and accomplishments at the workshop were described in detail in the Second Year-End Report. In all, one hundred and seven activities were revised for inclusion in the Year Three version of Specialized Instructional Program in the Arts.

● Survey of Instructional Goals and Related Objectives

As part of the developmental evaluation process, all site team members reviewed the 143 instructional objectives identified during Year One as the basis for the Specialized Instructional Program in the Arts. The purpose of the review was to select for the second-year field-test version of the program those objectives which were both (a) validated as

important educational objectives for moderately and severely handicapped youth and (b) identified as appropriate objectives for an arts-based instructional strategy.

A survey instrument was developed to review the goals and objectives utilizing two five-point Likert-type scales examining each of the 143 instructional objectives against two criteria:

- . the usefulness of the arts in teaching each instructional goal; and
- . the importance of each objective to its overall instructional goal.

In all, the survey contained 286 scales, 143 related to the "Usefulness of the Arts" criterion and an equal number related to the "Importance of Objective" criterion. Respondents were asked to complete all scales by circling responses ranging from 1-"Not useful," to 5-"Very useful," for the "Usefulness of Arts" criterion; and from 1-"not important," to 5-"very important" for the "Importance of the Arts" criterion.

Measures of central tendency including mean, median and standard deviation were calculated for each of the 286 scale responses.

Findings from the survey resulted in the selection of 56 student objectives and 12 separate instructional goals for inclusion in the specialized instructional program in the arts. (Results of the survey were presented and discussed in detail in the Year-Two Report.)

● Revised Specialized Instructional Program in the Arts

The revised Specialized Instructional Program in the Arts, a guide-book of arts activities entitled Independent Living and the Arts, was the major product of the Career and Life Skills Project's second year. A sample of the guide was submitted with the Year-Two Report. The guide

contained 107 arts activities which addressed instructional goals and related objectives in three separate instructional domains--Social Development (previously Personal-Social Skills), Daily Living and Vocational Preparation). Approximately 57 of the program's activities had been field tested during the project's second year. The remaining 50 activities had been developed during Year Two and were to be formally field tested during the project's third year.

The purpose of the guide was to provide site team members at each project site with a set of career and life arts activities for implementation with their moderately and severely handicapped students. Arts activities were designed to assist teachers in motivating, reinforcing and enhancing their student's development of career and life skills.

The revised guidebook was a tabulated three-hole punched binder design organized to maximize flexible utilization by teachers. Arts activities were formatted and organized so that they could be selected according to curriculum domains, specific instructional goals and objectives or art modalities. Major components of the Independent Living and the Arts guide are briefly described in the following sections.

. Instructional Domains, Goals and Objectives of the Revised Specialized Instructional Program

Fifty-six student objectives related to 12 separate instructional goals were addressed by the program's 107 arts activities. Twenty-seven objectives were related to the Social Development domain; 20 objectives to Daily Living and 9 objectives to the Vocational Preparation domain. Objectives were selected for inclusion in the program primarily on the basis of findings of the Survey of Instructional Objectives, Survey

findings were utilized to identify objectives which were regarded as both important as educational objectives and appropriate to an arts-based instructional strategy. Objectives which received a mean scale score of 3.5 and above on both the "Importance..." and "Usefulness of Arts" criteria were included in the guide materials. In certain cases, objectives which were similar in content were collapsed and treated as one objective.

Arts Activities

The Specialized Instruction Program contained 107 arts activities. Of these activities, 31 were in the visual arts mode; 25 in dance/movement; 29 in drama and 22 in the music mode.

All activities were designed with implementation by the special educator in mind. As such, no special training or advanced technical skills in the arts was required. Instructional procedures were presented in a sequential task-analytic mode, with the educational emphasis of the activity on the acquisition of career and life skills. The development of aesthetic understandings was not directly addressed by the materials.

The Revised Specialized Instructional Program in the Arts became the basis for all third year implementation and field-testing efforts. A copy of the program was submitted with the Second-Year Report.

4.0 YEAR THREE

4.1 Overview - Year Three

This section of the report describes the activities and accomplishments of the project's third and final year. As indicated in the third-year continuation request, all activities proposed for the project's final budget period were designed to realize the following objectives:

- To evaluate and assess the impact of the Specialized Instructional Program in the Arts on the career and life skills of moderately and severely handicapped youth at seven experimental sites.
- To refine the Specialized Instructional Program in the Arts for teaching career and life skills.
- To develop and disseminate an arts career guide to identify potential career opportunities in the arts for moderately and severely handicapped youth.
- To develop and implement a national, state and local dissemination plan for project materials and results.

Whereas most activities proposed to meet year three objectives were accomplished, substantial budget reductions (approximately 25%) necessitated some modification in the year-three work plan. All accomplishments and modifications will be described in section 4.2 by major objective and proposed activity.

4.1.2 Accomplishments By Major Objective and Activity

OBJECTIVE: TO EVALUATE AND ASSESS THE IMPACT OF THE SPECIALIZED INSTRUCTIONAL PROGRAM IN THE ARTS ON THE CAREER AND LIFE SKILLS OF MODERATELY AND SEVERELY HANDICAPPED YOUTH AT SEVEN EXPERIMENTAL SITES.

Activity 1.1: Finalize Criteria for the Selection of Three Additional Project Sites.

Selection criteria for three new project sites were finalized as proposed. As requested by the Project Officer, geographic distribution was made a primary criteria and new sites accordingly sought in the Midwest, Southwest, and Northeast. A second criteria, equal distribution of experimental subjects between moderately and severely handicapped categories, was finalized. The intent of this criteria was to achieve a sample population with a balanced distribution of students along the moderate to severe continuum. State differences in classifications and placement practices, together with the wide range of handicapping conditions subsumed under the moderate-severe category, required a flexible interpretation of this criteria. When selecting new sites, therefore, district level student classifications were utilized to determine sample subjects classification. General classificatory guidelines and parameters were provided potential sites to assist them in locating students appropriate for the project. A third selection criteria, representative educational settings, was also finalized. The intent of this criteria was to locate project activities in a range of educational settings typical of those serving moderately and severely handicapped youth in general.

The application of selection criteria to the three sites chosen is summarized in the matrix below:

Selection Criteria By Site

SELECTION CRITERIA

	New Site	Geographic Area Represented	Distribution Along Moderate to Severe Continuum	Educational Setting
S	Human Resources	Northeast	Moderate (some with	Special setting
I	Albertson, L.I.		severe physical	for students with
T			handicaps)	severe physical
E				handicaps.
				Integrated with
				respect to ability
	Cherokee Park	Southwest	Severe	Special residen-
	School			tial and school
	Enid, OK			facility
	Champaign-Urbana	Midwest	Moderate and severe	Integrated school
	Champaign, Ill.			placement

Activity 1.2: Select and Contract with Three Additional Local Education Agencies to Serve as Experimental Sites.

Three new project sites were selected and contracted with as proposed.

The three new sites were:

- o Human Resources School, Albertson, Long Island.
- o Cherokee Park School, Enid, Oklahoma.
- o Champaign-Urbana School District, Champaign, Ill.

It should be noted that third year activities were funded at a level which would support 6 rather than 7 project sites. The option of eliminating an original, geographically similar site (suggested by the Project Officer) was elected and the Leesburg, Va. site was eliminated from the project. In addition to the three original and three new project sites, a seventh site--the SPEED Developmental Center in Chicago Heights, Illinois--asked to participate in the project at no cost to NCAH.

Activity 1.3: Identify Site Team Leaders and Site Team Members at Each Experimental Site.

Site Team Leaders and Site Team Members were identified as proposed. At all sites the Site Team Leader was an individual with administrative authority over site team members, such as a principal, educational director or special education director. Site Team Member at all sites were special education teachers with primary responsibility for the educational program of handicapped students. Typically, Site Teams consisted of a principal or special ed director plus four special education teachers. A list of Site Team Leaders for each Experimental Site follows:

SITE TEAM LEADERS

Status	Site	Site Team Leader	Position
O R I G I N A L	Adamson J.H., Morrow, Ga.	Cherry Edwards Rayfield	Special Education Coord.
	Diggs School, Winston-Salem, N.C.	Ann Hairston	Principal
	Woodside School, Seattle, Wa.	Gilbert Kugel Dr. Sharon Hill	Principal Director, Secondary Special Ed. Programs
N E W	Cherokee Park School, Enid, Ok.	Joseph Jackson	Assistant Principal
	Champaign-Urbana, Schools, Ill.	Marji Jobe	Director, Special Ed. Programs
	Human Resources, Albertson, N.Y.	Dr. John Palmer	Director, Educational Research
	SPEED Developmental Center, Chicago Heights, Ill.	Betty Krebs	Director, Music Therapy

Activity 1.4: Identify Approximately 50 Handicapped Students At Each Project Site to Participate in the Specialized Instructional Program.

The identification of approximately 50 handicapped students per site to participate in the Specialized Instructional Program proceeded as planned. Selection of students was made by the Site Team Leaders and Members with advice from the Project Director provided on an as needed basis. Because of the project's requirement that Site Team Members and students be under one administrative jurisdiction and the low incidence of severe handicapping conditions among the general population, it was not always possible to identify as many as 50 students per site for participation. The number of students participating in the project ranged from a low of 25 at the Jefferson School in Champaign-Urbana to a high of 49 students at the Adamson Junior High School.

A profile of the sample student population, across sites is presented in Section 6.0 of this report.

Activity 1.5: Conduct an In-Service Training Meeting at each Experimental Sites.

In-service training meetings were conducted by the Project Director at all six experimental Sites as planned. Project materials were distributed and reviewed and technical assistance provided in the following areas:

- Procedures for administering student assessment measures
- Procedures for implementing the Specialized Instructional Program
- Procedures for completing "teacher logs" or field test evaluation forms
- Procedures for completing teacher attitudinal measures.

Activity 1.6: Pretesting of Moderately and Severely Handicapped Students.

~~Pretesting of handicapped students~~ proceeded as planned with one exception. Since monies originally requested for data analysis and evaluation were

reduced to one thousand dollars, it was necessary to reduce data collection and analysis activities. Accordingly the Adaptive Behavior Scale (ABS) was mandated as the instrument at all sites, and the Social and Prevocational Interest Inventory Form T (SPIB-T) made an optional instrument. The ABS was selected as the primary test instrument because of its suitability to all students in the project regardless of level of functioning. The SPIB-T was made optional on the basis of second year project findings which indicated that the instrument was only applicable to the higher functioning students in the project population.

Activity 1.7: Assess Site Team Members Attitudes Toward Handicapped Youth and the Career and Life Specialized Instructional Program.

All Site Team Members and Site Team Leaders participating in the project were assessed utilizing an instrument which measured their attitudes toward handicapped youth and the Career and Life Specialized Instructional Program in the Arts as planned. The assessment instrument utilized, Career and Life Attitudinal Measures, was developed specifically for the project to permit the pre and post-test comparison of teacher attitudes on three scales related to the content of the Specialized Instructional Program and on a fourth scale related to teachers' perceptions of their students' overall response to the art curriculum. To insure objectivity of response, scales were completed anonymously using an identifying number for coding purposes.

Activity 1.8: Implement and Evaluate the Specialized Instructional Program at all Experimental Sites.

PROCESS/CONTENT: Site Team Members at each experimental site implemented the Specialized Instructional Program in the Arts with their moderately and severely handicapped students in the arts from November, 1981 through May, 1982 as planned. Implementation procedures, essentially the same as those observed during year two of the project, specified regularly scheduled arts experiences, the infusion of arts into the ongoing educational program, and the maintenance of "teacher-logs"

to provide evaluative feedback on arts activities. Evaluation forms utilized during year three of the project were modified to meet the needs of year three activities. The primary goal of third year activity evaluations was to solicit suggestions for adapting arts activities to meet the functional deficits of students participating in the project.

Activity 1.9: Monitor and Provide Technical Assistance to all Experimental Sites.

Project Director monitored and provided technical assistance to all experimental sites as planned. Each of 7 sites was visited once during the program year to assure that project implementation and evaluation activities proceeded as proposed.

Activity 1.10: Conduct Periodic On-site Meetings of Project Site Team Leaders with Site Team Members.

Site Team Leaders held periodic meetings with site team members as planned.

Activity 1.11: Post Testing Handicapped Students Participating in the Specialized Instructional Program.

All moderately and severely handicapped students participating in the Specialized Instructional Program were post-tested on the Adaptive Behavior Scale. Procedures were the same as those utilized in pre-testing.

As mentioned earlier, the SPIB-T was made an optional test instrument the results of which would not be analyzed with project monies.

Activity 1.12: Conduct Responsive Evaluation.

The responsive evaluation component of the project was eliminated because of budget reductions mandated by the Office of Special Education.

Activity 2.2: Compile and Analyze Specialized Instructional Program Evaluative Data From All Experimental Sites.

Evaluative data on the Specialized Instructional Program in the form of "teacher logs," was collected at regular intervals throughout year three of the project as planned. Data was compiled by the Project Director and analyzed by the Third-Party Evaluator at regular intervals with specific reference to modifying or refining program materials. A final compilation and analysis of field-test data was prepared and is included in Section 6.0 of this report.

Activity 2.3: Utilize Selected Consultants to Refine Specialized Instructional Program

Consultants met for a two and one-half day workshop to review field-test data and to suggest revisions for the final version of the Specialized Instructional Program as planned. The revision workshop was held on July 5th, 6th and 7th in Washington, D.C. A description of the revision process is presented in Section 5.0 of this report.

Activity 2.4: Project Advisory Group Reviews Program Materials and Makes Recommendations for Finalized Specialized Instructional Program Guidebooks.

Because of position changes and communication constraints, the project's Advisory Group was not actively utilized during year three. Instead, project consultants with first-hand knowledge of project activities as well as expertise in the arts, special education and curriculum development were utilized to review program materials and make recommendations and suggestions for revision.

Activity 2.5: Document the Career and Life Specialized Instructional Program in the Arts in Final Guidebook Form.

All relevant evaluative data, field-test findings, consultant modifications and advisory group recommendations will be reviewed preparatory to documenting the Career and Life Specialized Instructional Program in final guidebook form. A camera-ready copy of the Program will be produced and submitted to O.S.E. as part of the final report.

OBJECTIVE III: TO DEVELOP AND DISSEMINATE AN ARTS CAREER GUIDE TO IDENTIFY POTENTIAL CAREER OPPORTUNITIES IN THE ARTS FOR MODERATELY AND SEVERELY HANDICAPPED YOUTH.

- Activity 3.1: Development of survey instrument to identify potential career opportunities in the arts.

As planned, survey instrument was developed to assist in identifying potential career opportunities in the arts for moderately and severely handicapped youth. The survey instrument solicited information from a variety of sources on past and currently available career opportunities in the arts. The term career opportunity for this survey was operationally defined to include both vocational and avocational pursuits.

- Activity 3.2: Identification of Agencies, Institutions and Other Resources to Assist in Identifying Career Opportunities in the Arts for Moderately and Severely Handicapped Youth.

A representative sample of national, regional, state and local agencies, institutions and other organizations providing arts services to handicapped persons was selected to be surveyed regarding career opportunities in the arts for handicapped individuals. The sample consisted of past grantees of NCAH's Special Projects and Model Projects programs from 1977 to the present.

In all a total of 90 organizations including museums, performing arts groups, sheltered workshops and departments of parks and recreation from across the nation were included in the sample.

- Activity 3.3: Surveying of Identified Agencies, Institutions and Other Resources to Assist in Identifying Career Opportunities in the Arts.

The identified sample of national, regional, state and local resources was surveyed, utilizing the instrument described in Activity 3.1. Where appropriate, additional information was sought through correspondence and telephone communication.

Activity 3.4: Compilation and Analysis of Data Collected From Survey of Potential Career Opportunities in the Arts.

PROCESS/CONTENT: Data collected from approximately 63 survey respondents relative to career opportunities in the arts for handicapped youth was compiled and analyzed. A report of findings is in preparation.

Activity 3.5: Development of Arts Career Guide Identifying Potential Career Opportunities in the Arts for Moderately and Severely Handicapped Youth.

Information gathered from survey activities is currently being compiled in a guidebook format and will be made available to interested parties by NCAH by spring.

OBJECTIVE IV: TO DEVELOP AND IMPLEMENT A NATIONAL, STATE AND LOCAL DISSEMINATION PLAN FOR PROJECT MATERIALS AND RESULTS

Activity 4.1: Identification and Selection of Potential National, State and Local Conferences at Which to Disseminate Project Materials

A variety of national, state and local conferences were identified as vehicles for disseminating project information and materials. Included among these were the annual meetings of The National Association of State Directors of Special Education; the Association for Supervision and Curriculum Development and the Council on Exceptional Children. Proposals for presentations were developed, submitted and accepted by all four national organizations. In addition to national presentations, Site Team Leaders from project sites in Winston-Salem, North Carolina; Seattle, Washington; and Atlanta, Georgia identified and scheduled project presentations at appropriate state, local and regional meetings.

Activity 4.2: Development of Model Program and Materials for Presentation at Selected Conferences.

A model program and materials were developed for presentation at selected national, state and local conferences as planned. The program was designed to 1) interest special educators in using the arts to teach basic career and life skills, 2) to disseminate samples of project materials and 3) to present preliminary research findings of the Career and Life Project. The program model and materials developed were provided to Site Team Leaders and NCAH staff for presentation at selected conferences.

Activity 4.3: Presentation of Project's Program Materials and Preliminary Findings at National, State and Local Conferences.

Project presentations by NCAH staff including the Project Director were made at the following national conferences:

- Annual Meeting of National Association of State Directors of Special Education, October, 1981.
- NCAH Annual Regional Training Conferences, February, March, 1982
- Annual Meeting of the Association for Supervision and Curriculum Development, April, 1982
- Annual Meeting of the Council on Exceptional Children, April, 1982

Expenses associated with conference presentations were borne by NCAH. In addition to national level presentations, Site Team Leaders from project sites in Winston-Salem, North Carolina; Seattle, Washington and Atlanta, Georgia made state, local and regional presentations as planned.

Activity 4.4: Dissemination of Project Information, Materials and Research Findings Utilizing Print Media.

As proposed, information regarding project activities and materials was disseminated on national, state, and local levels utilizing NCAH publication resources and communication networks. An article about the project appeared in NCAH's monthly newsletter, The ARTiculator; a brochure describing the Project's curriculum materials as well as other curriculum materials available through NCAH was developed and is presently circulated by NCAH; background information and sample lessons were incorporated into NCAH's Guide to In-Service Training; information regarding the materials was provided to NCAH's ten regional advisors and will be provided to NCAH's forty-two state agency grantees for FY '83. Plans are now underway for an article, co-authored by the Project Director, Eileen Daniels and the project's curriculum consultant, Dr. Helen Almanza, to be written and submitted to appropriate research and practice oriented journals.

Activity 4.5: Identification of Potential Publishers to Disseminate Project Materials.

A variety of strategies for ensuring the continued dissemination of project materials are currently being implemented by NCAH. Because of NCAH's past experience with the LINC system which involved a three-year hiatus between the initial entry into the LINC system and the actual publication of materials, in May NCAH submitted a formal request to the federal government to be exempted from the EDGAR regulations. (As yet, no response has been received.) In lieu of utilizing the LINC system at this time, the following approaches to publication are now under consideration:

- Publication of project materials by NCAH followed by dissemination through NCAH's Very Special Arts Festival Program in forty-two states.
- Publication of project materials by NCAH in cooperation with The Federation of Teachers (AFT) followed by dissemination through the AFT's 800,000 member network.

A final decision regarding the most effective dissemination strategy will be made by NCAH following (a) a response from the Department of Grants and Contracts, (b) the completion of market research, and (c) cost feasibility information currently being collected.

5.0 FINAL PRODUCTS

5.1 Description of the Final Field-Tested Edition of a Specialized Instructional Program in the Arts for Moderately and Severely Handicapped Youth

The final field-tested edition of a Specialized Instructional Program in the Arts for Moderately and Severely Handicapped Youth is an instructional guide entitled Arts for Living. Like its two earlier editions, this guide is designed for special and regular educators who wish to infuse the arts into their regular independent living program for handicapped adolescents. Sixty-eight field tested arts lessons encompassing experiences in visual arts, music, dance and drama are included in the guide. Each lesson has been designed to meet a specific instructional goal and a related student objective in three broad instructional areas -- Social Development, Daily Living and Vocational Preparation. A summary description of the composition of the guide follows. Detailed descriptions of the developmental process have been provided in earlier reports.

The Organization of the Guide

The guide itself is a spiral bound book containing five sections as follows:

- Teachers Guide - Eighteen pages designed to provide guide users with directions for using the guide; answers to questions frequently asked during the development process; guidelines for developing new activities; a list of instructional critical career and life goals and related objectives identified by educators during the course of the project; and an index to arts activities in the guide.

- Social Development: A collection of 42 field-tested lessons in dance, drama, music and the visual arts specifically designed to teach twenty-four separate instructional objectives in the area of social development.
- Daily Living: A collection of 12 arts lessons in dance, drama, music and visual arts designed to meet ten separate instructional objectives in the area of Daily Living.
- Vocational Preparation: A collection of 14 arts lessons in dance, drama, music and visual arts designed to teach ten separate instructional objectives in the area of vocational preparation.
- Appendixes: An additional resource to the teacher, this section contains an extensive listing of media and organizational resources in arts for the handicapped; a listing of basic materials needed to implement the instructional program; a description of adaptive techniques developed to assist the teacher in making all the arts accessible to all children; and finally, suggested warm-up activities to be used before specific lessons.

● The Lesson Format

Each of the sixty-eight lessons is organized according to the same field-tested format. Highlights of the format include: a clear statement of the instructional goal and related objective for which the lesson was developed; an illustration suggesting either a process or product associated with the lesson; a preparation section indicating approximate implementation time, materials needed, and where appropriate special comments noting special features and hints to the teacher; activity procedures outlining each step of the lesson in task-analytic fashion; and an assessment section providing the teacher with a convenient way of evaluating the effectiveness of the arts lesson. A special feature added to this year's format is an adaptations section designed to help teachers adapt the lesson to the special learning needs of handicapped students.

● The Lessons

Each lesson in the guide has been (a) developed with **extensive** input from arts and special educators, (b) field-tested by special educators in regular or special class settings and, finally, (c) carefully reviewed during year-three by the Project Director, the project's curriculum consultant and the project's third-year arts and special education consultants. At the close of the third year, each of the one hundred and seven activities which comprised the second edition of the Guide was reviewed by the Project Director and consultants against the following criteria:

- Was the arts lesson educationally sound, that is did it teach the intended skill in an efficient and effective manner?
- Was the arts lesson a valid experience for the art form in which it was classified?
- Was the activity free of any possibility (however remote) of harming a student physically or psychologically?
- Was each lesson sufficiently unique to warrant inclusion in the guide?

The application of these criteria resulted in reducing the size of the guide from 105 to 68 activities. Although the application of these criteria sometimes made it necessary to eliminate activities which received high field test ratings, in the judgment of the Project Director and curriculum consultant, quality control was far more important to maintain than quantity.

5.2 Sample of Final Field-Tested Guide, Arts for Living

The final field-tested guide entitled Arts for Living is submitted under separate cover with this report.

6.0 RESEARCH AND EVALUATION REPORT - YEAR THREE

The National Committee - Arts for the Handicapped

Increasing Career and Life Skills for Handicapped

Youth Through a Specialized Instructional

Program in the Arts

Grant Number: G007902260

Division of Innovation and Development

Special Education Programs

U. S. Department of Education

Evaluation Report - Year Three

Lawrence A. Larsen, Ph.D.

Division of Education

Johns Hopkins University

Baltimore, Maryland

Introduction

This report presents evaluative data collected during the final year of a three year project titled "Increasing Career and Life Skills for Handicapped Youth Through a Specialized Instructional Program in the Arts." The project was initiated in 1979 and was conducted by the National Committee - Arts for the Handicapped under Grant Number G007902260 awarded to the Committee by the Division of Innovation and Development, Special Education Programs, of the U. S. Department of Education. The primary purpose of the project was to demonstrate that arts activities can provide effective strategies for special education teachers to use in teaching personal and social, daily living, and occupational guidance and preparation skills to moderately and severely handicapped youths. The evaluative data considered in this report were obtained from the seven sites that participated in year three activities. These sites included Cherokee Park School in Enid, Oklahoma; Jefferson School in Champaign, Illinois; SPEED Developmental Center in Chicago, Illinois; Diggs Intermediate School in Winston-Salem, North Carolina; Human Resources School in Albertson, New York; Woodside School in Seattle, Washington; and Adamson Junior High School in Morrow, Georgia.

The information collected during the third project year is similar in many respects to the evaluative data obtained and reported by the third-party evaluator, Dr. William M. Reynolds of the University of Wisconsin-Madison, during the second project year. Comparisons are made in this report between the second and third year results where possible, and the reader may find it helpful to read the second year report before reviewing these third year findings. As was the case during the second

year, this report relies on (a) pretest and posttest measures of the attitudes of cooperating teachers toward handicapped youth generally and toward using arts activities as instructional vehicles for promoting the development of career and life skills among handicapped students, (b) pretest and posttest measures of the adaptive behavior levels of the students who participated in project activities, and (c) teacher completed evaluations of the instructional activities designed by project staff members and contained in the Independent Living and the Arts curriculum guide. Three additional measures, including (a) evaluations of training workshops presented by project staff members for cooperating teachers from the project sites, (b) pretest and posttest data from the Social and Prevocational Information Battery - Form T (Irvin, Halpern & Reynolds, 1979), and (c) a Survey of Instructional Goals and Related Objectives completed by the cooperating teachers, were included in the second year study but were unavailable for the third year evaluation.

Description of Student Participants

The cooperating teachers at each of the seven sites were asked to complete a student information form for each handicapped youth who participated in the project. Two of the sites, Woodside School in Seattle and the Human Resources School in Albertson, New York, failed to submit these information forms for their students; hence the summary information contained in Tables 1 and 2 describes the student participants from only five of the seven sites.

Table 1 on the following page describes the composition of the student sample in terms of sex and handicapping condition. There were 107 males and 75 females among the 182 students for whom student information forms were available. As indicated in Table 1, some of the forms were not completely filled out; information regarding the handicapping conditions represented in the sample was

Table 1

Student Characteristics: Sex and Handicapping Conditions

Site	Sex			Handicapping Condition			
	Total	Male	Female	Total	M.R.	S.I.	M.H.
Jefferson School	25	14	11	21	21	0	5
Cherokee Park School	44	23	21	42	42	0	9
Diggs Intermediate	49	35	14	48	48	0	10
SPEED Devel. Ctr.	29	16	13	29	29	0	13
Adamson Junior High	35	19	16	28	26	2	10
Totals	182	107	75	168	166	2	47

available for only 168 of the 182 participants. The teachers reported that nearly all (166 of 168) of the students were mentally retarded, and 47 of these 166 were described as having at least one additional handicapping condition (e.g., orthopedically impaired, speech impaired, visually impaired, or hearing impaired). In only two cases, both at Adamson Junior High School, were the students categorized as having speech impairments but not mental retardation.

Table 2 presents chronological age and IQ score information for the participating students. All chronological ages were reported in terms of number of years, rather than years and months, and therefore underestimate actual ages by an indeterminate amount. The youngest students attended the Jefferson School in Champaign, Illinois where the average age was 14.54 years, and the oldest students in the sample attended the SPEED Developmental Center in Chicago, Illinois where the average age was 18.34 years. The average age for the entire group of 180 students for whom information was available was 16.69 years.

Table 2
Student Characteristics: Chronological Age and IQ Scores

Site	Chronological Age			IQ Score		
	Number	Mean	S.D.	Number	Mean	S.D.
Jefferson School	24	14.54	2.60	23	50.04	9.06
Cherokee Park School	44	16.91	2.48	43	47.00	13.75
Diggs Intermediate School	49	17.67	1.32	47	39.09	7.67
SPEED Developmental Ctr.	29	18.34	1.44	29	47.62	8.93
Adamson Junior High	34	15.19	1.72	32	42.91	6.99
Totals	180	16.69	2.35	174	44.61	10.55

The IQ data shown in Table 2 must be interpreted with caution. For reasons of economy, it was obtained from existing records at the five sites and had been collected at different times using different tests that were administered by different examiners. The reported IQ scores ranged from an average of 39.09 at Diggs Intermediate School to an average of 50.04 at Jefferson School; the overall average across sites was 44.61. Thus, the average student participating in the third year project activities apparently fell within the IQ range that defines moderate mental retardation.

The student information forms also requested that the cooperating teachers supply academic achievement scores for their students. An inspection of the completed forms indicated that the reported information was not amenable to descriptive analysis as it was presented in several different formats and was based on a wide variety of assessment instruments.

The Measurement of Teacher Attitudes

The valid and reliable measurement of attitudes, and the identification of relationships between attitudes and overt behavior, remains an elusive goal in psychological research. While a number of different techniques for constructing attitude scales have been available for many years (see, e.g., Edwards, 1957), their application in particular situations is extremely difficult and frequently results in data that fall short of meeting the minimum requirement of scientific validity and reliability. The measurement problems notwithstanding there is merit in attempting to measure attitudes as they are very likely important determinants of behavior, and attitude changes are frequently considered to be desired outcomes of educational interventions.

A series of five attitude scales that had been developed and used by the third-party evaluator who was associated with the project during its second year of operation were used in the third project year as one means for assessing the effects of project activities. According to the second year evaluation report, the rationale for this effort was that "... attitudes play an important role both in understanding the impact and outcome of the project, and also for examining factors basic to the implementation of the project curriculum" (p. 50). One of the five scales sought to determine whether the cooperating teachers would show any changes in their general attitudes toward handicapped youth as a result of using the project curriculum; of the remaining four scales, one asked the teachers to judge the overall response of their students to the curriculum activities and the other three investigated the attitudes of the teachers toward using arts activities to teach personal and social skills, the skills of daily living, and in the occupational guidance and preparation of handicapped youth, respectively.

The five scales use the semantic differential technique developed by Osgood,

Suci, & Tannenbaum (1957) and each consists of a series of bi-polar adjectives (e.g. weak-strong, worthless-valuable, active-passive, etc.) separated by a 7-point rating scale. The scale asking the teachers to judge the overall response of their students to the arts curriculum was comprised of 15 adjective pairs; each of the other four scales consisted of 25 adjective pairs. Several items on each scale were reverse keyed so that a high score was always indicative of a positive attitude. The third-party evaluation report for the second project year contains some reliability and validity data for the five scales (see pages 52-56).

As was the case during the second project year, the teachers participating in third year activities were asked to complete the five attitude scales before and after using the arts curriculum. Complete data were available for only 21 cooperating teachers employed at five of the seven sites, as shown in Table 3 below.

Table 3
Sources of Attitudinal Data

Site	Number of Respondents
Jefferson School	2
Cherokee Park School	4
Diggs Intermediate School	5
SPEED Developmental Center	4
Adamson Junior High School	<u>6</u>
Total	21

The means and standard deviations of the scores obtained on the pretest and posttest administrations of the five attitude scales, and t-ratios for related samples computed between pretest and posttest results, are reported in Table 4. A number of summary statements can be made about these data and

Table 4
Means, Standard Deviations, and t-Test Values for
Attitude Scale Pretest and Posttest Scores

Scale	Maximum Possible Score	Pretest		Posttest		<u>t</u>	p
		Mean	SD	Mean	SD		
Handicapped youth are:	175	121.43	11.11	120.76	11.05	-.25	ns
The students' overall response to the arts curriculum will be:	105	80.57	9.48	80.43	7.50	-.08	ns
Teaching personal and social skills through the arts is:	175	142.29	10.45	135.86	12.84	-2.32	<.02
Teaching daily living skills through the arts is:	175	141.33	11.29	135.05	18.82	-1.35	ns
Teaching occupational guidance and preparation through the arts is:	175	136.24	16.45	136.52	11.93	.09	ns

their relationship to second year results. First, by comparing the average scores obtained on the pretest and posttest administrations of each scale with the maximum possible scores for the scales, it can be seen that the cooperating teachers expressed generally positive attitudes toward handicapped youth, the responses of handicapped youth to the arts curriculum, and toward the use of arts activities as instructional techniques in all three curricular domains. Second, the attitudes

demonstrated by the third year teachers were generally more positive on all five scales than was true of the teachers participating in the project during its second year. Third, as was true of the attitude scale results reported for the second year, there was very little attitude change between the pretest and posttest administrations of the scales. The second year teachers had shown small increases in positive attitudes on two of the scales, and small decreases in positive attitudes on the other three scales; none of these changes reached statistical significance. The third year teachers, on the other hand, demonstrated a relatively large and statistically significant decrease in their positive attitudes toward using arts activities in teaching personal and social skills; small and statistically nonsignificant decreases in their positive attitudes toward handicapped youth in general, toward their students' overall response to the arts curriculum, and toward using arts activities to teach daily living skills; and a small and statistically nonsignificant increase in their positive attitudes toward using arts activities for occupational guidance and preparation purposes. Finally, the respondents tended to be very similar in their attitudes toward using arts activities as instructional devices in all three of the curriculum domains.

The interpretation of the attitude scale results is problematic. The declines in positive attitudes that characterized the data from both the second and third project years (decrements were obtained on seven of the ten scale administrations), even though these declines were not generally statistically reliable, may have been caused by an understandable decrease in the initial enthusiasm that many teachers show when they are introduced to a new curriculum and teaching methodology. The workshops that introduced them to the curriculum and its applications, and the fact that a representative from a national organization visited their place of employment to teach them how to employ the curriculum and use its activities, likely led to a high degree of interest and enthusiasm that

they could not be expected to maintain for the duration of the project. The fact that their attitudes did not show significant declines over the several months that they used the curriculum suggests that they held a durable interest in the enthusiasm for using arts activities in daily teaching duties that is not found in most instructional methodologies.

One other factor should also be noted in interpreting the attitudinal data shown in Table 4. An inspection of the raw data sheets indicated that many of the respondents checked the highest point on the rating scale for all of the adjective pairs on all five scales during the pretest. This "ceiling effect" made it possible for them to show a decrease, but not an increase, in their positive attitudes when the scales were given as a posttest.

Adaptive Behavior Scales

The AAMD Adaptive Behavior Scale (Nihira, Foster, Shellhaas, & Leland, 1974) was used as the single measure of the effects of project activities on the student participants during the third project year. According to its authors, these scales were designed to measure the adaptive behavior skills, defined as the ability of the individual to cope with the natural and social demands of his/her environment, of mentally retarded and emotionally maladjusted individuals. The scales are divided into two parts. Part I consists of multiple behavioral items considered important to the individual's personal independence in the activities of daily living; these items are grouped into ten domains including (1) independent functioning, (2) physical development, (3) economic activity, (4) language development, (5) number and time concepts, (6) domestic activity, (7) vocational activity, (8) self-direction, (9) responsibility, and

(10) socialization. Part II of the scales, which provides measures of maladaptive behavior considered to be indicative of personality and behavior disorders, was not used in the evaluation of project effects. A second instrument, the Social and Prevocational Information Battery - Form T (Irvin, Halpern, & Reynolds, 1979), which had been administered as one measure of the impact of the project on student behavior during the second year, was omitted from the third year evaluation because it proved to be too difficult for many of the students and because of financial constraints experienced by the project during the final year.

Complete pretest and posttest data from the Adaptive Behavior Scale were available for a total of 224 students, including 25 students from Jefferson School, 35 students from Adamson Junior High School, 28 students from SPEED Developmental Center, 49 students from Diggs Intermediate School, 44 students from Cherokee Park School, 33 students from the Human Resources School, and 12 students from Woodside School. Separate analyses of the adaptive behavior information were computed for each site because of the unequal number of participants contributing data to the study from the different sites and to make the results as meaningful as possible to the personnel at each location. In order to facilitate a comparison of third year results with second year results, the same statistical test (the t-test for related samples) used during the second year was used to analyze third year scores. The means, standard deviations, and t-ratios computed on the pretest and posttest data from each site are presented in Tables 5 - 11.

The adaptive behavior data from 25 students at Jefferson School (see Table 5 on the following page) showed significant improvements in eight of the ten domains; small and nonsignificant increases in adaptive behavior were

Table 5
Means, Standard Deviations, and t-Test Values for Adaptive Behavior
Scale Pretest and Posttest Scores: Jefferson School
(N = 25)

Adaptive Behavior Domain	Pretest		Posttest		<u>t</u>	p
	Mean	SD	Mean	SD		
1. Independent Functioning	79.92	20.75	87.36	13.08	3.04	<.01
2. Physical Development	21.28	2.85	21.96	2.49	1.82	ns
3. Economic Activity	7.72	4.40	9.44	3.63	5.48	<.01
4. Language Development	29.28	7.99	31.92	5.16	3.19	<.01
5. Numbers and Time	8.96	2.90	9.68	2.36	2.70	<.02
6. Domestic Activity	10.04	5.66	12.32	4.55	4.26	<.01
7. Vocational Activity	8.88	1.75	9.00	1.81	.39	ns
8. Self-Direction	14.48	5.03	16.00	4.06	12.16	<.01
9. Responsibility	4.08	1.16	4.84	1.19	3.61	<.01
10. Socialization	21.32	5.09	23.44	2.67	3.24	<.01

obtained in the remaining two domains, physical development and vocational activity.

The adaptive behavior scores collected from 44 students at Cherokee Park School (see Table 6) show a similar pattern. Statistically significant improvements in adaptive behavior were obtained in all of the domains with the exception of those relating to physical development and responsibility.

The adaptive behavior results for Diggs Intermediate School are presented

Table 6

Means, Standard Deviations, and t-Test Values for Adaptive Behavior

Scale Pretest and Posttest Scores: Cherokee Park School

(N = 44)

Adaptive Behavior Domain	Pretest		Posttest		<u>t</u>	P
	Mean	SD	Mean	SD		
1. Independent Functioning	83.77	8.82	86.32	9.51	3.97	< .01
2. Physical Development	22.41	2.19	22.73	1.54	1.41	ns
3. Economic Activity	3.34	2.67	4.48	2.86	3.96	< .01
4. Language Development	24.64	8.38	26.91	7.71	4.90	< .01
5. Numbers and Time	7.82	3.16	8.43	3.17	2.92	< .01
6. Domestic Activity	9.52	2.63	10.32	2.58	2.64	< .02
7. Vocational Activity	5.50	3.82	6.50	3.65	2.15	< .05
8. Self-Direction	12.98	4.25	14.16	3.46	2.41	< .05
9. Responsibility	3.64	.91	3.64	1.11	0	ns
10. Socialization	17.02	4.84	18.57	3.77	2.76	< .01

in Table 7 on the following page. The 49 students attending the Diggs School showed less improvement in adaptive behavior levels than did either the students at Jefferson School or Cherokee Park School; although improvements were noted in nine of the ten domains, in only four instances (language development, number and time concepts, self-direction, and responsibility) did these gains reach statistical significance. The Diggs students showed a statistically non-significant decline in their ability to engage in vocational activities

Table 7

Means, Standard Deviations, and t-Test Values for Adaptive Behavior

Scale Pretest and Posttest Scores: Diggs Intermediate

(N = 49)

Adaptive Behavior Domain	Pretest		Posttest		<u>t</u>	P
	Mean	SD	Mean	SD		
1. Independent Functioning	86.04	14.29	86.67	12.37	.53	ns
2. Physical Development	22.45	2.68	22.61	1.10	.62	ns
3. Economic Activity	5.96	3.76	6.39	3.89	1.45	ns
4. Language Development	24.12	7.54	25.76	7.05	2.49	<.02
5. Numbers and Time	7.35	3.58	7.92	3.68	2.41	<.05
6. Domestic Activity	10.67	4.87	11.00	5.27	1.01	ns
7. Vocational Activity	9.00	2.39	8.37	2.92	-1.73	ns
8. Self-Direction	14.39	4.86	15.80	3.76	3.20	<.01
9. Responsibility	4.16	1.50	4.55	1.40	2.34	<.05
10. Socialization	21.27	4.11	21.96	3.85	1.72	ns

between the pretest and posttest administrations of the adaptive behavior measure.

The 28 students contributing data to the project from the SPEED Developmental Center (see Table 8) showed small but nonsignificant declines in the physical development and vocational activity domains; small but nonsignificant improvements in the independent functioning, domestic activity, self-direction, and responsibility domains; no change in the socialization domain; and statistically significant improvements in the economic activity, language development, and number and time

Table 8
Means, Standard Deviations, and t-Test Values for Adaptive Behavior
Scale Pretest and Posttest Scores: SPEED Developmental Center
(N = 28)

Adaptive Behavior Domain	Pretest		Posttest		<u>t</u>	P
	Mean	SD	Mean	SD		
1. Independent Functioning	83.54	11.52	83.57	11.22	.11	ns
2. Physical Development	21.71	2.43	21.32	4.04	-.60	ns
3. Economic Activity	6.68	3.69	7.11	3.72	2.88	< .01
4. Language Development	25.14	4.35	26.04	4.84	2.12	< .05
5. Numbers and Time	8.96	3.13	9.18	3.07	2.05	< .05
6. Domestic Activity	10.39	4.02	10.61	3.86	1.85	ns
7. Vocational Activity	8.75	1.82	8.71	1.96	-.49	ns
8. Self-Direction	14.68	3.31	14.82	3.34	1.65	ns
9. Responsibility	4.39	1.08	4.43	1.08	1.12	ns
10. Socialization	19.39	4.44	19.39	4.39	0	ns

concepts domains.

The adaptive behavior data from Adamson Junior High School (see Table 9) indicates that the 35 participants from that location showed improvements in all ten domains. However, these improvements were statistically reliable in only the independent functioning, economic activity, domestic activity, and self-direction domains.

As shown in Table 10, the adaptive behavior data received by the third-party evaluator from the Human Resources School failed to show any changes whatsoever

Table 9
Means, Standard Deviations, and t-Test Values for Adaptive Behavior
Scale Pretest and Posttest Scores: Adamson Junior High
(N = 35)

Adaptive Behavior Domain	Pretest		Posttest		<u>t</u>	P
	Mean	SD	Mean	SD		
1. Independent Functioning	73.00	16.10	77.17	12.20	2.49	< .02
2. Physical Development	20.63	4.57	21.71	3.02	1.92	ns
3. Economic Activity	5.69	3.36	6.46	3.92	2.85	< .01
4. Language Development	24.20	6.82	24.86	5.35	.98	ns
5. Numbers and Time	7.06	3.18	7.17	2.74	.25	ns
6. Domestic Activity	9.09	4.80	10.17	3.90	2.84	< .01
7. Vocational Activity	7.26	2.52	7.71	1.81	1.27	ns
8. Self-Direction	12.97	4.18	14.31	4.73	2.24	< .05
9. Responsibility	3.74	1.59	3.80	1.39	.38	ns
10. Socialization	18.06	4.50	18.59	3.75	1.09	ns

between the pretest and posttest administrations of the scales. Given that there were 33 student participants at this site, and that several months should have elapsed between the pretests and posttests, it is impossible to account for this stability without concluding that the pretest scores were used by the cooperating teachers when the posttests were being completed, rendering the data unusable.

The adaptive behavior results obtained from the 35 students from Woodside School are shown in Table 11. The Woodside students exhibited small but statistically nonsignificant improvements in the economic activity and responsibility

Table 10
Means, Standard Deviations, and t-Test Values for Adaptive Behavior
Scale Pretest and Posttest Scores: Human Resources School
(N = 33)

Adaptive Behavior Domain	Pretest		Posttest		<u>t</u>	P
	Mean	SD	Mean	SD		
1. Independent Functioning	67.76	21.12	67.76	21.12	0	ns
2. Physical Development	13.00	4.58	13.00	4.58	0	ns
3. Economic Activity	7.79	3.08	7.79	3.08	0	ns
4. Language Development	32.27	4.69	32.27	4.69	0	ns
5. Numbers and Time	11.18	1.60	11.18	1.60	0	ns
6. Domestic Activity	5.27	3.45	5.27	3.45	0	ns
7. Vocational Activity	8.00	3.86	8.00	3.86	0	ns
8. Self-Direction	16.00	2.39	16.00	2.39	0	ns
9. Responsibility	3.97	.97	3.97	.97	0	ns
10. Socialization	21.58	2.66	21.58	2.66	0	ns

domains; stastically reliable gains in the independent functioning, physical development, language development, number and time concepts, vocational activity, self-direction, and socialization domains; and a stastically significant decrement in the domestic activity domain.

With the exception of the Human Resources School, the adaptive behavior results were very similar across the project sites. As a rule, the student participants at each site exhibited improvements in their adaptive functioning between the pretest and posttest administrations of the Adaptive Behavior Scales, and in

Table 11
Means, Standard Deviations, and t-Test Values for Adaptive Behavior
Scale Pretest and Posttest Scores: Woodside School
(N = 12)

Adaptive Behavior Domain	Pretest		Posttest		<u>t</u>	P
	Mean	SD	Mean	SD		
1. Independent Functioning	98.00	4.65	100.17	3.83	3.13	<.01
2. Physical Development	22.67	1.11	23.50	.65	4.98	<.01
3. Economic Activity	8.33	2.43	9.42	2.66	1.75	ns
4. Language Development	33.17	2.54	36.00	2.74	2.70	<.05
5. Numbers and Time	9.92	1.04	11.33	.62	7.31	<.01
6. Domestic Activity	15.00	2.74	13.00	1.83	-2.29	<.05
7. Vocational Activity	8.58	1.38	10.25	1.36	5.83	<.02
8. Self-Direction	12.42	4.25	19.50	.65	5.83	<.01
9. Responsibility	4.83	1.14	5.25	.92	1.25	ns
10. Socialization	21.25	3.37	24.08	1.85	3.16	<.01

many instances their gains were statistically significant. On only one of the ten domains at one of the seven sites did the students show a significant decline in their adaptive skills.

Mean scores for the entire sample of 226 students were also computed for each of the ten domains and are compared in Table 12 with similar scores obtained for the 121 students who participated in the project during its second year. As shown in Table 12, there was a remarkable consistency in project

Table 12

Adaptive Behavior Scale Pretest and Posttest Mean and Mean
Difference Scores for Project Years Two and Three

Adaptive Behavior Scale Domain	Project Year	Mean Pretest Score	Mean Posttest Score	Mean Difference Score
1. Independent Functioning	2	79.85	83.63	+3.78
	3	76.13	82.96	+6.83
2. Physical Development	2	22.00	22.35	+ .35
	3	20.63	20.96	+ .33
3. Economic Activity	2	5.74	6.39	+1.15
	3	6.08	6.82	+ .74
4. Language Development	2	23.94	25.73	+1.79
	3	26.61	28.05	+1.44
5. Numbers and Time	2	7.30	7.63	+ .33
	3	8.47	8.91	+ .44
6. Domestic Activity	2	9.86	11.01	+1.15
	3	9.54	10.11	+ .57
7. Vocational Activity	2	7.40	8.53	+1.13
	3	7.84	8.06	+ .22
8. Self-Direction	2	13.48	15.07	+1.59
	3	14.07	15.38	+1.31
9. Responsibility	2	4.00	4.10	+ .10
	3	4.02	4.23	+ .21
10. Socialization	2	19.34	21.07	+1.73
	3	19.76	20.69	+ .93

results across the two years of operation. Not only did the students show gains in each of the ten domains each year, but these gains were very similar in magnitude each year.

Although the overall increases in adaptive behavior scores between pretest and posttest administrations of the AAMD Adaptive Behavior Scale are indicative

of student progress in a number of important behavioral domains, it is impossible to attribute these gains solely to student participation in the arts activities engendered by the project. The establishment of cause-effect relationships between the use of the project curriculum and adaptive behavior gains would require either a comparison group or additional pretest information. In the former case, the gains shown in Tables 5 - 11 could have been compared with pretest-posttest scores obtained from comparison groups of similar students attending school at the seven sites; in the latter case, a baseline could have been established for each student by administering the Adaptive Behavior Scale to the students on two occasions before the project began, e.g. six months before it started and again immediately before its implementation.

Teacher Evaluations of Curriculum Activities

The Independent Living and the Arts curriculum is comprised of 107 different arts activities organized into social development, daily living, and vocational preparation domains. Each activity is succinctly described in the curriculum in terms of (a) the instructional goal and related student objective that it addresses, (b) a written description and an illustration of the experience that it provides for the students, (c) a list of the materials, if any, that are necessary for its implementation, (d) procedures for assessing whether it was effective in attaining its stated objective, (e) step-by-step procedures for its implementation, (f) suggested adaptations that could be used in individual cases, and (g) additions that can be used to promote both generalization and maintenance of acquired skills.

In addition to activity descriptions, the curriculum guide contains a supply of activity evaluation forms and the cooperating teachers were asked to complete

and submit one of these forms for each activity that they employed with their students.

The first nine items on the 17-item evaluation form solicited the teachers' opinions about the activity descriptions contained in the curriculum. The first five items asked whether the teachers found the illustrations, capsule descriptions, lists of materials, assessment procedures, and additions to be "helpful" or "not helpful," while the remaining four items called for "yes" or "no" responses to the questions of whether the instructional procedures were clearly presented, appropriately sequenced, sufficiently inclusive, and sufficiently specific.

Items 10, 11, and 12 on the form were all scored on a 5-point rating scale where a score of "5" reflected the highest or most desirable rating. Item 10 asked if the activity was "greatly enjoyed" or "not enjoyed" by the students; item 11 asked if the activity was "very useful" or "not at all useful" in teaching the related objective; and item 12 asked if the teacher would "recommend wholeheartedly" or "never recommend" the activity to other teachers.

Items 13, 14, and 15 were also scored on a 5-point scale but in these instances a rating of "3" was the highest or most desirable rating. Item 13 asked if the activity was "too complicated," "just right," or "too simple" to implement; item 14 asked if the activity allowed for too little, the right amount, or too much freedom of expression; and item 15 asked if the activity was "too low," "just right," or "too high" for the level of functioning of the majority of the students in the teacher's classroom.

Items 16 and 17 both called for either a "yes" or "no" response. Item 16 asked if the teachers found the adaptations suggested in the activity descriptions to be helpful, and item 17 asked if the teachers had developed other adaptations for their students.

A total of 466 forms evaluating a total of 105 of the 107 activities included in the curriculum were submitted by the cooperating teachers. There was quite a bit of variability in the number of forms available for different activities, ranging from 10 forms for two activities and only one form for several activities; on the average, 4.43 forms were analyzed for each of the 105 activities.

A summary of the activity evaluation results for the first nine items on the evaluation forms is presented in Table 13a on the following pages. Table 13a also presents the average number of minutes that the teachers reported were required for implementing each activity. It should be noted that some of the forms were not completely filled out by the teachers; thus the average times for activity implementation, and the percentage of "helpful" and "yes" responses, shown in the table are in some instances based on fewer ratings than indicated in the "number of forms" column.

Overall, the teachers reported that each activity took nearly one hour (56.06 minutes) to implement. The average times reported for the individual activities ranged from a high of 360 minutes to a low of 10 minutes with a standard deviation of 72.61 minutes.

The cooperating teachers were extremely positive in their evaluations of the written descriptions of the curriculum activities. As shown at the bottom of Table 13a, the percentage of items marked as either "helpful" or "yes" ranged from 81.69% in the case of the usefulness of the adaptations suggested in the activity descriptions to 97.13% for the manner in which the instructional procedures were sequenced. The grand mean for all responses across the nine items was 92.53%, and many of the activities were given "helpful" or "yes" ratings by the teachers on all nine of the items that related to their written descriptions.

Table 13a

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Average Time (mins.)	Percentage of "Helpful" and "Yes" Responses								
			Student Experience: Illustration	Student Experience: Capsule Description	Materials: Information Provided	Assessment: Usefulness	Additions: Usefulness	Instructional Procedures: Clarity of Presentation	Instructional Procedures: Sequencing	Instructional Procedures: Inclusivity	Instructional Procedures: Specificity
Assembly Line Mosaic	6	105.00	100	100	100	83	100	100	100	100	100
Beat the Clock	8	46.70	88	100	75	88	100	100	100	100	100
Bend, Stretch, Twist	4	21.25	100	50	100	50	75	50	100	33	25
Best Dressed	3	26.60	100	66	100	100	33	100	100	100	100
Blues Swap	4	53.75	75	100	100	100	100	75	100	100	100
Body Casts	1	90.00	100	100	100	100	100	100	100	100	100
Body Grammar	7	139.00	86	100	100	100	71	100	100	100	100
Body In Motion	6	36.50	100	100	100	100	100	100	100	100	100
Body Language	3	25.00	100	100	100	100	66	100	100	100	100
Body Silhouettes	4	45.00	75	75	100	25	0	100	100	100	100
Box Body	1	38.00	100	100	100	0	100	100	100	100	100
Bridges	3	19.00	100	100	100	100	100	66	100	66	100
Career Museum	1	40.00	100	100	100	100	100	100	100	100	100
Careers College	5	120.00	100	100	100	100	80	100	100	100	100
Chalkboard Abstract	8	48.50	63	100	100	88	100	100	100	100	100
Chance Dance	5	30.60	80	100	100	100	80	100	100	100	100
Circle of Friends	10	25.50	90	100	100	90	80	90	90	90	90
Class Song	2	27.50	50	100	100	100	50	100	100	100	100
Clay Flute	2	30.00	100	100	100	50	0	100	100	100	100
Clay It Again Sam	3	193.33	100	100	100	66	66	100	100	100	66
Comings and Goings	9	35.71	66	100	66	100	88	100	100	100	77
Company's Coming	5	30.00	100	80	80	80	100	100	80	80	100
Contact Improv	4	21.25	100	100	100	100	100	100	100	100	100
Daily Doings	4	61.25	100	100	100	100	100	100	100	100	100

Table 13a (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Average Time (mins.)	Percentage of "Helpful" and "Yes" Responses								
			Student Experience: Illustration	Student Experience: Capsule Description	Materials: Information Provided	Assessment: Usefulness	Additions: Usefulness	Instructional Procedures: Clarity of Presentation	Instructional Procedures: Sequencing	Instructional Procedures: Inclusivity	Instructional Procedures: Specificity
Dating Game	8	35.50	75	88	75	75	57	100	100	100	100
Dear Diary	4	58.75	100	100	100	75	100	100	100	100	100
Disco Beat	4	16.66	75	100	100	100	100	100	100	100	100
Dress Rehearsal	3	56.72	100	100	100	100	100	100	100	100	100
Emotion Masks	4	127.50	75	75	75	100	100	100	100	100	100
Excuse Me, Please	1	60.00	100	100	100	100	100	0	100	100	100
Explore Yourself	5	31.25	80	100	100	100	75	60	100	100	100
Extended Simon Says	6	32.00	50	100	100	100	100	100	100	100	100
Faces	7	47.14	100	100	100	86	83	100	100	100	100
Facts and Places	2	120.00	100	100	100	100	100	100	100	100	100
Facts in Folk	4	31.25	75	100	100	75	100	100	75	100	100
Family Tree	3	60.00	100	100	100	66	100	100	100	100	100
Feel the Beat	6	65.60	100	83	100	50	83	83	83	83	83
Feelings	5	31.00	80	100	100	100	100	100	100	100	100
Flim Flam	1	40.00	100	100	100	100	100	100	100	100	100
Flip Chart	2	32.50	100	100	100	100	100	100	100	100	100
Grocery Basket Upset	6	81.66	100	100	83	67	100	100	100	100	100
Hand Jive	5	20.00	40	80	80	60	60	60	80	80	60
Hello, Body	5	21.25	60	80	100	80	100	40	100	80	80
Hoe Down	4	136.25	75	100	100	75	100	75	75	75	75
Hokey Pokey	3	71.66	100	100	100	100	100	100	100	100	100
Human Machine	2	10.00	100	100	100	50	100	100	100	100	100
I Am	4	18.33	100	100	100	100	100	100	100	100	100
Images	5	25.00	100	100	100	80	80	100	100	100	100

Table 13a (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Average Time (mins.)	Percentage of "Helpful" and "Yes" Responses								
			Student Experience: Illustration	Student Experience: Capsule Description	Materials: Information Provided	Assessment: Usefulness	Additions: Usefulness	Instructional Procedures: Clarity of Presentation	Instructional Procedures: Sequencing	Instructional Procedures: Inclusivity	Instructional Procedures: Specificity
Impulses	5	23.00	80	100	100	80	60	100	100	100	100
In Name Only	5	81.25	100	100	100	80	75	100	100	100	100
Jingle Rag	1	20.00	0	100	0	100	100	100	100	100	100
Duke Box Jam	2	90.00	100	100	100	100	100	100	100	100	100
Ladies and Gentlemen	5	48.00	100	80	100	100	100	100	100	100	100
Let's Make a Deal	4	51.25	100	100	100	50	100	100	100	100	100
Lights, Camera, Action!	9	57.00	88	100	83	89	78	100	100	100	89
Listening Lines	8	41.00	100	100	100	100	86	100	100	100	100
Melody Role	1	17.00	100	100	0	100	100	100	0	100	100
Menu Madness	7	48.57	86	100	100	100	67	100	100	86	100
Mime Time	5	29.00	80	100	100	100	80	100	100	100	100
Mirror, Mirror	4	30.00	100	100	100	50	100	100	100	100	100
Mirrors	6	32.50	100	100	83	100	60	100	100	83	66
Mood Moves	5	30.00	100	100	100	100	100	100	100	100	100
Morning Madness	1	30.00	100	100	100	100	0	100	100	100	100
Moving Pictures	1	60.00	100	100	100	100	100	100	100	100	100
Murals	9	159.38	66	100	88	88	100	100	100	100	100
Music in Me	3	31.00	33	100	100	100	50	100	100	100	100
Musical Signs	7	29.29	86	100	100	100	66	100	100	100	100
Name Game	5	23.00	80	100	60	80	100	80	80	80	75
Nine to Five	3	33.33	66	33	100	66	66	100	100	100	100
Number Please	8	41.67	88	100	100	88	88	100	100	100	100
On the Move	4	37.50	100	100	100	100	100	100	100	100	100
Paint Your Space	3	40.00	100	100	100	100	33	66	100	100	100

Table 13a (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Average Time (mins.)	Percentage of "Helpful" and "Yes" Responses								
			Student Experience: Illustration	Student Experience: Capsule Description	Materials: Information Provided	Assessment: Usefulness	Additions: Usefulness	Instructional Procedures: Clarity of Presentation	Instructional Procedures: Sequencing	Instructional Procedures: Inclusivity	Instructional Procedures: Specificity
Pick a Winner	4	172.00	100	100	100	100	100	100	100	100	100
Picture Perfect	5	39.00	100	100	80	100	100	100	100	100	100
Picture That!	3	30.00	66	100	66	100	50	100	100	100	100
Play Me	6	34.00	50	100	83	50	80	100	100	100	100
Positions Posted	1	240.00	100	100	100	100	0	100	100	100	100
Potato Logo	6	195.00	100	100	100	80	50	100	100	100	100
Progressive Painting	6	93.33	80	100	100	100	66	83	100	83	66
Projection Connection	4	66.25	100	100	100	75	75	100	100	100	75
Psychedelic Sign	3	50.00	100	100	100	100	100	100	66	66	100
Push, Pull, Stop, Go	6	31.67	100	100	100	100	100	100	100	100	100
Quick Draw McGraw	5	48.75	60	80	80	100	80	100	100	100	100
Rag Doll	5	48.75	100	100	100	100	100	100	100	60	100
Shadow Dancing	3	53.33	100	100	100	100	100	100	100	100	100
Sign Chime	1	120.00	100	100	100	100	100	100	100	100	100
S. O. S.	7	34.29	86	86	100	71	100	100	100	100	100
Spotlight	6	142.50	100	100	100	100	83	100	100	83	100
Straw Oboe	3	38.33	66	100	100	0	33	33	66	33	33
Takes More Than Me	7	38.33	83	100	100	83	100	83	100	100	100
A Tiny Little Gear	2	22.50	100	100	100	50	100	100	100	100	100
To the Rescue	4	40.00	100	100	75	100	100	100	100	100	100
Touch and Tell	3	30.00	100	100	66	100	100	100	100	100	66
Trash Can Beautiful	3	360.00	100	100	100	66	66	100	100	100	100
Trust or Bust	5	32.50	40	60	60	60	50	100	100	100	100
Wired Stranger	10	43.00	80	87	87	100	100	88	100	88	88

Table 13a (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Average Time (mins.)	Percentage of "Helpful" and "Yes" Responses								
			Student Experience: Illustration	Student Experience: Capsule Description	Materials: Information Provided	Assessment: Usefulness	Additions: Usefulness	Instructional Procedures: Clarity of Presentation	Instructional Procedures: Sequencing	Instructional Procedures: Inclusivity	Instructional Procedures: Specificity
Walter Mitty's Delight	1	40.00	0	100	100	100	0	100	100	0	100
What can I do?	4	35.00	75	100	75	75	100	75	100	75	75
What's My Mime?	5	34.00	100	100	100	100	80	100	80	100	100
What's on the Menu?	7	42.14	100	100	100	100	100	100	100	100	100
What's Your Problem?	3	28.33	66	100	100	100	100	100	100	100	66
Work Recipes	5	45.00	100	100	100	60	80	100	100	100	100
You Are What You Eat	5	143.00	100	100	100	100	80	100	100	100	100
Yours and Mine	6	22.00	83	100	100	100	50	100	83	100	100
Yours, Mine or Their?	4	31.25	50	100	100	100	75	100	100	100	100
Overall Means	4.43	56.06	37.47	96.07	95.30	86.84	91.69	95.13	97.31	96.33	94.08

The average ratings given to the activities by the cooperating teachers on items 10-17 of the evaluation forms are shown in Table 13b beginning on the following page. The overall means of the ratings on each item are shown at the bottom of this table.

As noted earlier, the first three items shown in Table 13b were rated on a 5-point scale where a "5" was the highest or most desirable rating that could be given each item. The teachers generally agreed that their students enjoyed participating in the activities (overall mean rating of 3.81); that the activities were quite useful in teaching and/or reinforcing related objectives (overall mean rating of 3.76); and that they would recommend the activities to other teachers (overall mean rating of 3.79).

The next three items shown in Table 13b were also rated on a 5-point scale, but in these cases a "3" or "just right" was the highest or most desirable rating for each item. The teachers judged that the activities tended to be a little too complicated for their students (overall mean rating of 2.88), while being "just right" in terms of their allowances for freedom of expression (overall mean rating of 3.03). The teachers also judged that the activities were well suited for the ability levels of the majority of their students (overall mean rating of 3.08).

The final two items related to the adaptations that were suggested for each activity. Overall, 78.42% of the respondents reported that the adaptations were helpful, while less than half of them (41.94%) indicated that they had developed other adaptations for their students.

The data shown in Tables 13a and 13b clearly indicate that the teachers participating in the project during the third year were very satisfied with most of the activities contained in the Independent Living and the Arts curriculum. In addition to providing one indicator of project success, these data should

Table 13b

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Mean Rating for Item							Mean Number of "Yes" Responses
		Student enjoyment of activity	Usefulness of activity in teaching/reinforcing related objectives	Teacher willingness to recommend activity to other teachers	In terms of being complicated, was the activity "just right?"	Was the activity "just right" in allowing freedom of expression?	Was the level of the activity "just right" for student majority?	Were the suggested adaptations helpful?	Did the teacher develop other adaptations?
Assembly Line Mosaic	6	3.33	4.00	3.67	2.83	2.83	2.83	67	20
Beat the Clock	8	4.25	4.00	4.13	3.25	3.00	2.63	100	14
Bend, Stretch, Twist	4	4.25	3.50	3.50	2.75	2.75	3.50	50	33
Best Dressed	3	4.33	4.00	4.33	2.66	3.33	3.00	66	33
Blues Swap	4	4.25	4.25	4.25	3.00	3.33	3.00	100	25
Body Casts	1	3.00	4.00	4.00	2.00	4.00	4.00	100	0
Body Gram	7	4.14	4.00	4.28	3.28	3.60	2.85	67	67
Body in Motion	6	4.30	4.00	4.30	3.10	3.00	2.80	100	40
Body Languages	3	3.33	3.66	3.66	2.00	3.00	3.66	33	33
Body Silhouettes	4	3.75	3.25	3.75	2.00	2.66	3.66	66	100
Box Body	1	5.00	5.00	3.00	3.00	3.00	3.00	100	0
Bridges	3	3.66	3.66	4.00	3.00	3.00	3.00	100	33
Career's Museum	1	2.00	2.00	2.00	4.00	2.00	2.00	0	0
Career Collage	5	3.60	3.60	3.40	3.00	3.00	2.80	75	0
Chalk Board Abstract	8	4.13	3.75	3.63	3.00	3.13	3.00	63	33
Chalk Dance	5	4.40	4.40	4.40	2.50	3.00	3.00	100	33
Circle of Friends	10	3.40	4.00	4.00	3.30	2.55	3.10	100	89
Class Song	2	4.00	3.00	3.50	2.30	3.00	3.00	50	0
Clay Flute	2	2.50	1.50	1.50	2.00	3.50	4.00	100	0
Clay It Again, Sam	3	5.00	4.66	5.00	2.66	2.66	3.33	33	33
Comings and Goings	9	4.00	4.00	3.66	2.80	3.33	3.33	100	25
Company's Coming	5	3.60	4.40	4.20	3.00	3.20	4.00	80	80
Improv	4	4.25	3.25	4.00	2.50	3.00	2.60	75	33

Table 13b (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Mean Rating for item							Mean Number of "Yes" Responses
		Student enjoyment of activity	Usefulness of activity in teaching/reinforcing related objectives	Teacher willingness to recommend activity to other teachers	In terms of being complicated, was the activity "just right?"	Was the activity "just right" in allowing for freedom of expression?	Was the level of the activity "just right" for student majority?	Were the suggested adaptations helpful?	
Daily Doings	4	5.00	5.00	5.00	3.00	3.00	3.00	100	50
Dating Game	8	3.37	3.12	3.37	2.87	3.00	3.42	43	60
Dear Diary	4	3.00	3.00	3.50	3.25	3.00	2.50	100	0
Disco Beat	4	4.75	4.25	4.50	3.25	3.00	3.00	67	67
Dress Rehearsal	3	3.60	4.70	4.00	2.60	3.00	2.60	100	100
Emotion Masks	4	3.75	3.50	3.75	2.75	3.00	3.25	50	50
Excuse Me, Please	1	3.00	3.00	3.00	4.00	2.00	2.00	100	0
Explore Yourself	5	3.80	4.20	4.20	3.00	3.00	3.00	80	20
Extended Simon Says	6	4.50	4.50	4.50	2.60	3.00	3.16	100	67
Faces	7	4.00	4.00	4.00	3.00	3.14	3.42	33	83
Facts and Places	2	4.00	4.00	4.50	3.50	2.50	2.50	100	100
Facts in Folk	4	4.25	4.50	4.75	2.75	3.00	3.25	75	75
Family Tree	3	4.00	4.00	4.00	3.33	2.00	1.33	100	67
Feel the Beat	6	3.83	3.00	3.33	2.66	3.00	2.83	83	60
Feelings	5	4.20	4.20	4.00	3.00	3.00	3.00	100	50
Flim Flam	1	5.00	4.00	4.00	3.00	3.00	3.00	100	0
Flip Chart	2	3.00	4.00	3.50	3.50	3.00	2.00	100	0
Grocery Basket Upset	6	3.80	4.30	4.10	2.60	3.10	3.50	100	50
Hand Jive	5	3.60	2.00	3.00	2.20	2.80	2.60	100	50
Hello, Body	5	3.20	3.00	3.20	3.00	3.40	4.20	75	25
Hoe Down	4	4.25	4.25	4.50	3.50	2.75	3.00	75	33
Hokey Pokey	3	4.00	4.00	4.00	3.00	3.00	3.00	67	33
Human Machine	2	3.00	3.00	3.00	3.50	4.00	3.50	100	0

Table 13b (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Mean Rating for Item							Mean Number of "Yes" Responses
		Student enjoyment of activity	Usefulness of activity in teaching/reinforcing related objectives	Teacher willingness to recommend activity to other teachers	In terms of being complicated, was the activity "just right?"	Was the activity "just right", in allowing for freedom of expression?	Was the level of the activity "just right" for student majority?	Were the suggested adaptations helpful?	
I am	4	4.00	4.00	4.25	3.00	3.50	3.25	67	0
Images	5	4.20	4.60	4.40	2.80	3.40	3.80	0	25
Impulses	5	3.80	3.60	3.80	3.20	3.60	2.60	75	20
In Name Only	5	4.40	4.40	4.60	3.00	3.00	3.00	100	100
Jingle Rag	1	2.00	3.00	3.00	1.00	3.00	4.00	100	0
Juke Box Jam	2	4.50	4.50	5.00	3.00	2.50	3.50	100	0
Ladies and Gentlemen	5	4.00	4.20	4.20	3.60	2.80	2.80	100	0
Let's Make a Deal	4	4.00	3.50	3.75	3.00	3.00	3.00	60	25
Lights, Camera, Action!	9	4.88	4.77	4.88	3.11	3.00	2.88	100	50
Listening Lines	8	4.75	4.25	4.25	3.00	3.13	2.87	88	44
Melody Role	1	-	-	-	3.00	3.00	3.00	100	13
Menu Madness	7	3.85	4.28	3.42	2.85	2.57	3.00	0	100
Mime Time	5	4.20	3.40	4.00	3.20	3.20	2.60	100	14
Mirror, Mirror	4	4.00	4.75	4.25	2.75	2.75	3.50	80	20
Mirrors	6	3.50	3.50	3.83	2.66	3.50	3.50	100	0
Mood Moves	5	3.40	4.00	3.80	3.00	3.00	3.20	67	80
Morning Madness	1	2.00	2.00	2.00	3.00	3.00	3.00	80	0
Moving Pictures	1	5.00	5.00	5.00	3.00	3.00	4.00	100	100
Murals	9	3.77	3.56	3.88	2.66	3.22	3.75	75	67
Music in Me	3	4.00	3.66	3.00	2.33	4.00	3.00	100	50
Musical Signs	7	4.14	4.57	4.28	2.85	3.42	2.85	100	60
Name Game	5	3.40	4.00	4.00	3.20	2.75	3.00	100	25
Nine To Five	3	4.00	3.66	3.66	2.66	3.33	3.33	50	33

Table 13b (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Mean Rating for Item							Mean Number of "Yes" Responses
		Student enjoyment of activity	Usefulness of activity in teaching/reinforcing related objectives	Teacher willingness to recommend activity to other teachers	In terms of being complicated, was the activity "just right?"	Was the activity "just right" in allowing for freedom of expression?	Was the level of the activity "just right" for student majority?	Were the suggested adaptations helpful?	
Number Please	8	4.50	4.75	4.50	2.88	3.00	3.50	63	57
On the Move	4	4.00	4.00	4.50	2.50	2.50	3.00	100	67
Paint Your Space	3	4.67	4.67	4.67	3.00	3.00	3.00	50	100
Pick a Winner	4	3.50	3.75	4.00	2.75	3.00	3.50	75	0
Picture Perfect	5	3.60	3.80	4.20	3.00	3.20	2.80	80	0
Picture That!	3	1.66	2.33	2.33	2.00	2.33	3.00	0	0
Play Me	6	3.20	3.00	2.83	3.16	3.83	2.66	67	40
Positions Posted	1	3.00	3.00	3.00	3.00	3.00	3.00	100	0
Potato Logo	6	4.66	3.66	4.00	2.50	3.16	3.67	33	60
Progressive Painting	6	3.50	3.50	3.66	3.16	4.00	3.00	50	25
Projection Connection	4	4.25	4.00	4.25	2.75	3.25	3.25	75	100
Psychedelic Sign	3	4.00	4.00	4.00	3.33	3.33	2.66	67	67
Push, Pull, Stop, Go	6	4.16	4.16	4.00	2.83	3.66	3.16	83	50
Quick Draw McGraw	5	4.40	3.80	4.00	2.40	3.00	3.60	60	50
Rag Doll	5	3.80	4.20	3.80	3.00	2.80	2.80	100	50
Shadow Dancing	3	3.00	3.67	3.33	3.00	3.00	2.67	100	0
Sign Chime	1	4.00	4.00	4.00	3.00	3.00	3.00	100	100
S.O. S.	7	4.28	3.85	4.14	2.85	3.42	3.28	86	71
Spotlight	6	4.33	3.50	4.00	2.83	2.66	3.00	83	50
Straw Oboe	3	3.66	2.33	2.66	2.66	2.00	3.00	0	33
Takes More Than Me	7	3.83	3.50	3.33	2.83	3.16	3.16	83	20
A Tiny Little Gear	2	3.50	3.00	3.00	3.00	3.00	3.00	100	0
To the Rescue	4	3.75	3.75	3.75	3.25	3.25	3.50	50	25

Table 13b (Continued)

Cooperating Teacher Evaluations of the Arts Curriculum Activities

Activity Name	Number of Forms	Mean Rating for Item							Mean Number of "Yes" Responses
		Student enjoyment of activity	Usefulness of activity in teaching/reinforcing related objectives	Teacher willingness to recommend activity to other teachers	In terms of being the complicated, was the activity "just right?"	Was the activity "just right" in allowing for freedom of expression?	Was the level of the activity "just right" for student majority?	Were the suggested adaptations helpful?	Did the teacher develop other adaptations?
Touch and Tell	3	4.33	4.66	4.33	3.33	3.00	2.33	100	50
Trash Can Beautiful	3	4.33	4.33	3.67	2.33	3.33	3.33	66	50
Trust or Bust	5	2.80	2.40	3.00	2.40	2.60	3.80	20	75
Vieled Stranger	10	4.30	3.90	4.20	3.30	2.77	2.77	88	67
Walter Mitty's Delight	1	3.00	4.00	3.00	3.00	3.00	3.00	100	0
We Are Family	4	3.25	3.25	3.25	3.25	3.25	3.25	75	0
What's My Mime?	5	4.40	3.80	4.00	3.20	3.50	2.60	80	20
What's on the Menu?	7	4.57	4.42	4.57	3.00	3.00	3.00	100	57
What's Your Problem?	~	3.00	3.33	3.33	2.00	3.33	4.00	100	0
Work Recipes		3.60	3.20	3.60	2.80	3.20	2.40	100	60
You Are What You Eat		3.80	4.20	4.20	2.80	2.60	2.80	50	25
Yours and Mine	6	4.00	4.15	3.66	3.00	3.16	3.16	100	20
Yours, Mine or Their?	4	4.00	4.50	4.25	3.00	2.75	3.00	33	25
Overall Means		3.81	3.76	3.79	2.88	3.03	3.08	78.42%	41.94%

prove to be useful to the project staff if and when the activities in the curriculum are revised.

Summary and Conclusions

The results of the third year project evaluation can be summarized as follows:

1. The students participating in third year activities were generally classified as moderately mentally retarded, although many were reported to be multihandicapped and some fell into the IQ range that defines severe mental retardation.
2. The attitudes of cooperating teachers toward handicapped youth in general and toward using arts activities for teaching career and life skills to such youths were very positive and showed very little change during the period that they used the project curriculum, as measured by the semantic differential technique. These results are very similar to those obtained during the second year of the project.
3. The student participants at five of the six sites showed increases on most of the behavioral domains measured by the AAMD Adaptive Behavior Scales. The lack of either a comparison group or a second baseline data point makes it impossible to attribute these gains to their participation in project activities.
4. The cooperating teachers were very positive in their evaluations of the activities contained in the Independent Living and the Arts curriculum. They judged the written descriptions of the activities to be clearly and completely described, and they rated the activities

as being enjoyable for their students, useful in teaching/reinforcing related objectives, and as being approximately right in terms of their complexity, allowances for freedom of expression, and ability levels of their students.

In sum, the Independent Living and the Arts curriculum represents a useful approach for teaching critical career and life skills to handicapped youth and should be made available to special education teachers throughout the country.

Submitted by:

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Project Evaluator, Third Year

October 29, 1982

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